

Available data indicate that a total of up to 24 million pounds of all types of tire rubber may have been consumed in this segment in 2015. Overall, use of California tires to make crumb rubber has fluctuated within tight boundaries for the past decade and a half. To transcend this level, it appears that a quantum leap in customer demand for products or applications within existing markets, or a new high-volume innovation that satisfies customer requirements in a different market area, is needed. As described in the next section, Caltrans is investigating new policies that could more than double current use in the paving segment. In addition to crumb rubber, an estimated 17.5 million pounds of buffings flowed to California processors, who either brokered it to other firms or directly used it themselves in a variety of market applications, especially pour-in-place, molded, and landscape mulch applications.

**Civil Engineering:** Use of tire-derived aggregate (TDA) in civil engineering applications declined in 2015 by 8 percent to 1.2 million PTEs, with 1 million PTEs of this being used at seven landfills, and with the remaining TDA used largely in one project by Bay Area Rapid Transit (BART). An uptick in grant awards to both landfill and non-landfill projects is expected to result in an increase in this category in 2016.

**Alternative Daily Cover:** In 2015 three landfills reported use of a total of 1.5 million PTEs as ADC, the same level as in 2014. This amount is expected to stay flat into 2016, although the amount could increase if other landfills choose to use tire ADC in the future.

**Tire-Derived Fuel:** Consumption of California whole waste tires and processed TDF by four California cement kilns totaled 8.6 million PTEs in 2015, a 2 percent increase compared to 2014. In addition, these California cement plants consumed an estimated additional 1.1 million PTEs in TDF derived from waste tires imported from out-of-state to California-based processors serving these plants. TDF continues to provide a strong, stable market, but is approaching its maximum capacity given current permitting and operational infrastructure. Within the boundary of current capacity, demand is strongly dependent on changes in the construction industry, and is expected to remain flat in 2016.

**Disposal:** Waste tire disposal increased in 2015 by 35 percent to 8.5 million PTEs, the highest level since 2011. This was due in part to softening in the export market spurred by a strike at the ports, lower pricing for baled waste tires, and enforcement activities by CalRecycle.